

Notes drawn up by the Senior Surgeon and Sanitary Commissioner with the Government of Mysore and issued under the authority of Mr. V.P. Madhava Rao, in Administrative charge of Plague Preventive Measures.

[These Notes should be given wide publicity to in every Town and Village throughout the State, and a copy put up in every Police Station, Sub-Station, Out-post, and Ukhad by the Police, and in every Village Chavadi by the Patel, and as many copies as are available may be distributed among the people.]

I. WHAT IS PLAGUE ?

Plague is the most dangerous of all diseases, especially to Natives, often Proving fatal within 24 hours; it most frequently attacks those who live in ill-ventilated dwellings and who keep filth in and about their houses. When once it gets into a town or village, it kills more than one-half of the people, and it is with the greatest difficulty got rid of.

II. HOW IS IT RECOGNISED ?

It usually commences suddenly with high fever, and after one or two days lumps or swellings about the size of a lime appear in the groin or arm-pit or neck. The whites of the eyes are congested, and the patient is dull and looks stupified as if drunk.

Any one presenting these signs, and who has come from an infected locality (and the whole of the Bombay Presidency is infected), should be regarded as suffering from Plague.

III. MEASURES TO BE ADOPTED.

No person suffering from Plague should be removed from the place where first discovered, and no one but his relatives should be allowed near him, and they should wear shoes and always wash their hands after touching the patient.

Information should be given at once to the nearest available Medical Officer, and all medical and sanitary instructions issued by him should be strictly attended to and rigidly enforced.

N.B.—The only way of arresting the disease is to detect the first case and isolate it, for which purpose it is best to put the patient and relatives into a temporary shed outside the town or village and no one allowed to go near them except the Medical Officer.

SYLLABUS OF INSTRUCTIONS IN DISINFECTION AND OTHER MATTERS RELATING TO PLAGUE.

1. Procedure to be adopted on the discovery of a Plague case or death in a house—

- (a) Immediate removal and complete isolation of patient, in a Plague Hospital, where his belongings are disinfected. In case of death, the body should be buried in the manner hereinafter described. The patient should be carried on a stretcher and not allowed to walk, however strong he may appear to be—this is important medically.
- (b) Immediate isolation of all those occupying the house in which the Plague case is found; these people are kept in a segregation camp, apart from the general public and from Plague patients. They are allowed to take with them their cooking pots, bedding, and necessary clothing, which are all disinfected on arrival at the segregation camp. The people of adjacent houses should also be segregated if in the habit of sleeping or eating in the infected house; or if the partition walls between their houses and the infected house are of matting, boarding, or other thin and pervious material.
- (c) After the removal of the patient and his friends, close the infected house at once, securely—don't trust to cheap locks, *screwing up the doors* will be the best measure, for the house is very dangerous and infected, and people must be prevented from entering it.
- (d) *Unroof the house at once*; after closing it, so as to admit the sun and fresh air freely; these are both excellent disinfectants. Make also openings in the walls if necessary for the same purpose.

2. Next disinfect the house and things remaining in it as soon as possible proceeding as follows—

- (a) *Open the door of the house*; let a workman with a watering can (provided with a nose) water the ground about the entrance well with the disinfectant solution; next he should enter the house quietly and water the whole floor of the house and all articles lying about on it. He should then take a pump and spray the walls and all articles of furniture freely with the disinfectant solution. The reason for the foregoing is, that presumably the Plague poison does not float in the air, but lies about the floor and walls in the dust and dirt; it is therefore advisable to lay the dust and prevent it rising (with the Plague poison) into the air; so that workmen entering the house should not inhale the latter, and thus become infected.
- (b) Next remove all the furniture, clothing, &c., out of the house into the open air. Burn all cheap articles, *e. g.*, grain and other food; matting, firewood, old clothing and rags, putting with these pots, grinding stones, &c.; the latter will be strongly heated and therefore disinfected. There will now remain certain articles, *e. g.*, good furniture and clothing, too valuable to be destroyed. These must be thoroughly dipped and soaked (when possible) in a tub of disinfectant and left there for five minutes. If too large to be dipped, swab and drench them with disinfectant, not allowing a spot of surface to escape. Special attention should be paid to all parts and surfaces of furniture which have rested on the floor of the house, *viz.*, the legs of tables and chairs and bottoms of boxes. These disinfected articles should remain exposed to the sun after this as long as possible.

(c) *Next, the empty house itself should be disinfected.*—The principle here is to thoroughly wet and drench the whole interior surface of the house with disinfectant solution, floor, walls and what may remain of the ceiling. Special attention should be paid to any rat holes, cracks in the walls, and drainage exit holes, also the corners. The Plague poison is presumably most abundant on the floor and the lowest part of the walls, and these should be most thoroughly treated. After the above, the floor, walls, and ceiling (rafters, &c.) should be thoroughly whitewashed, not a spot of any part escaping. To the white-wash it is well to add chlorinated lime (bleaching powder) in considerable quantity, if it can be obtained, as the free chlorine then given off will help to kill the Plague poison. The articles which have been taken out of the house may now be put back into it, and the house should be again securely closed. Such a disinfected house is much safer than it was before disinfection, but still cannot be pronounced absolutely safe. The poison of Plague is extremely minute, and easily escapes the action of disinfectants when hidden away in cracks and crevices in wood and walls. The safest statement to make on this matter is that a disinfected house only becomes *absolutely safe* when all Plague has disappeared for some time from the neighbourhood. Another measure which is very useful in destroying Plague poison in a house is to burn a thick layer of dry grass or straw on the floor; old bamboos which naturally contain some oil are better still, for they burn quickly and fiercely, the result being that the walls and floor of the house become very hot indeed, from the effect of the very rapid and fierce combustion. It is well also to water the immediate surroundings of a house with disinfectants, especially gutters and drains. Disinfecting powder should also be sprinkled about.

(d) All workmen engaged in disinfection of infected places and articles should wear shoes, for it is believed that the Plague poison readily enters the body through wounds, however small. No one with wounds on hands or feet should undertake disinfection work.

3. *Disposal of Plague corpses.*—Not more than four men should be allowed to form the funeral party. If it be impossible to prevent friends attending, they should be kept at a distance of at least ten yards from the body by the Police. Before going near the body, the four men above mentioned should strip off all their clothing with the exception of their dhotas. They should be provided with a large sheet, saturated with disinfectant lotion, which should be thrown over the corpse and tucked round beneath it. They should then raise the body in the sheet and place it upon a cheap bamboo stretcher and carry it away to the burial or burning ground, taking with them the bedding and clothing the patient has been using during his illness, and avoiding, in their journey, people and houses. If buried, bury at least seven feet deep, and cover the body in the grave with a thick layer of quicklime. The grave should then be filled in, and any remaining belongings of the patient, together with the stretcher on which he has been carried, should be completely burnt up. If cremated, the body, bamboo stretcher, and all other belongings of the patient should be thoroughly burnt to ashes. The four men of the funeral party are next thoroughly disinfected, before they go near any one else, or near the rest of their clothing. They may take off their dhotas and steep them in the disinfectant solution for at least five minutes, and wash the whole of their bodies very thoroughly with the same. They then proceed to put on the rest of their clothing and may be allowed to depart. It is best to select your funeral party, if possible, from people in your segregation camp, for you can then keep them under observation.

4. *Rats and Plague. Rats very easily contract Plague.*—If in any locality, near which the Plague is occurring, several rats are found dead with no marks of injury on them, having to all appearance died natural deaths, it may be concluded

that they have died of Plague. Plague buboes are often present in these rats. Such Plague rats are usually found in the gullies and gutters around a house, sometimes in the house, often in the roof. The important point now to remember is that the tenants of the house near or in which the rats are found are *sure* to be attacked with Plague if they do not vacate the house immediately. Neighbouring houses are also unsafe, as the rats while sick have probably travelled about the immediate vicinity. The tenants therefore of adjoining houses should also vacate their premises, all these people going into a segregation camp, for there is a great likelihood that they are infected, and they should therefore be kept apart from the general population. In the case of a small village in which Plague rats have been found, the wisest course for the people to take is to vacate the whole village and live in temporary shelters in the jungle. If Plague rats are found in the roof of a house, thoroughly remove and burn the rafters, bamboos, tiles, &c., forming it. Plague rats should be burnt to ashes, as they teem with Plague poison. Don't touch the rats with the fingers, but lift and carry them with some implement which should be burnt with the rats.

5. *Disinfectants* (i.e., agencies which thoroughly destroy and kill Plague poison)—

(a) Burning to ashes: extremely good.

(b) *Exposure to the hot sun and fresh air*: very good, but cannot be counted upon to reach all the poison hidden in any article.

(c) Perchloride of mercury, corrosive sublimate: an excellent and powerful disinfectant when used in a strength of *one part* of the perchloride to *thousand parts* of water. One and a half drams of the perchloride to one gallon of water.

N.B.—6 quart bottles = 1 gallon: to get the same strength in native weights and measures, take $\frac{1}{2}$ tola of the perchloride to 5 *pukka Bengal seers* of water.

The perchloride of mercury dissolves slowly in water, but its solution can be greatly hastened by adding to the water common salt, in amount about six times the weight of the perchloride taken. The salt and the perchloride being added to the water, stir well for fully ten minutes, and the disinfectant solution is then ready for use. The quantities above recommended really give a strength of 1 part of perchloride to about 800 of water; owing, however, to the low powers of solubility of the mercury, it is well to err on the right side.

N.B.—The perchloride is still more powerful if prepared thus—

(c) Perchloride $\frac{1}{2}$ oz.

Hydrochloric acid 1 oz.

Water 3 gallons.

This equals one in thousand parts.

For an immersion bath, use perchloride solution of a weaker strength, viz., 1 to 2,000 or 1 to 3,000 of water. To get this, take the $\frac{1}{2}$ tola ($\frac{1}{2}$ dram) of perchloride and add 15 to 20 *pukka seers* of water (3 to 4 gallons).

N.B.—The perchloride solutions are *very* poisonous, and care should be taken that men and animals do not drink them.

(d) Other disinfectants (chemical)—

(1) Carbolic acid: good—of a strength of 1 measure of the acid to 20 measures of water.

(2) Phenyle: another form of carbolic acid; good; should be used in the same proportion as (1).

(3) Jeyes' Fluid: also good; used in similar strength to (1) and (2).

For an immersion bath of (1), (2) or (3), use 1 part of the disinfectant to 100 of water.

(4) Permanganate of Potash 1 per cent } good
Acid Sulphuric 1 „ }

(5) Sulphate of copper in 5 per cent solution; good.

- (6) *Boiling water*: an excellent disinfectant for clothing, and always obtainable. Put the clothing in a vessel containing boiling water and keep it thoroughly immersed for fully ten minutes.

N.B.—The water must be over a fire and boiling, bubbling *all the time*.

- (6) *Implements, Pumps*—

- (a) *The Holborn brass pump*: very useful; it should be well oiled before use and well washed in water afterwards, as the metal of the pumps is corroded by the perchloride solution.
- (b) *Chinese wooden pumps*: very good and powerful. Any native made pumps will do equally well, provided they throw a good spray a considerable distance.
- (c) *Watering cans, whitewash brushes, half barrels and buckets*, are also required for the preparation of the whitewash and disinfectant solution. Galvanized buckets should be painted or japanned.

- (7) *Recognition of Plague*.—If in any village or town, in the District, individuals are suddenly attacked with more or less severe fever from which they die in the course of a few days (three to five), the conclusion is that the disease is Plague. This is the more certain if Plague has been gradually approaching the neighbourhood. It must however be remembered that the patient may die after only a few hours' illness, or he may live for a week or two. Swelling known as buboes are usually found in one or more of the following regions: groins, arm-pits and neck. They are often small and better seen than felt, therefore hold up the arms and compare the two exposed arm-pits; compare also the two groins. The patient with Plague looks and feels very ill; the face is often haggard and thinner looking; expression dull and heavy; eyes usually glistening and slightly reddish; often there is a staggering gait and history of falls; for the muscles of the body are much weakened and also made irregular in their action by the poison of the disease. Vomiting frequently occurs at the onset of the disease. The bowels are usually constipated. Cough with much reddish watery phlegm is present in some cases. The tongue when moist is usually thickly coated with white fur and has a red tip and edges; when dry, it is, together with the lips, brown and cracked. The pulse is usually bad and rapidly fails.

Instructions regarding Plague Administration for the general guidance of District and other Officers, issued by the Government of Bombay, under date the 10th January 1898, and re-issued by the Plague Commissioner in Mysore, for the information and guidance of all Officers on Plague Duty.

1. Plague is a disease which is essentially associated with insanitary conditions in human habitation, the chief of which are accumulations of filth, overcrowding and the absence of light and ventilation.
2. It is, in the first instance at least, a disease of locality, and is mainly conveyed from place to place by individuals in their person, clothing and personal effects, who have resided in the infected locality.
3. The essential measures to be taken for preventing the spread of the disease are its early recognition in a locality, the removal of the inmates from the infected locality or area, which, in the first instance, may be only a room or house, their segregation for a specific period, the disinfection of their persons, clothing and personal effects, and of the houses with their contents, situated within the infected locality.
4. The first steps to be taken are in connection with the sickness and mortality. There are, at present, no methods in actual operation by which these can be accurately ascertained. Infectious diseases are not notified, and the registration of deaths is imperfect. Means must be adopted to improve the latter, and check the results by recording in towns all funerals which pass the octroi posts, noting the name of the deceased and the locality of the house in which the death occurred, and by posting trustworthy subordinates, either members of the Police force or of the Revenue Department, at all burying and burning grounds, noting similar information. These subordinates, not being connected with the Municipality, will afford valuable aid in checking the returns, and they will assist the Municipal authorities in arriving at correct results.
5. In villages, the Patils must submit weekly returns of deaths in each village, within their respective jurisdiction, to the Mámátdár, who will forward them to the Collector of the district, after noting on each any peculiarity in the incidence of the deaths, the mortality for the corresponding week during the past three years, and explaining, if he can, any excess. When the Mámátdár is not satisfied as to the cause of any excessive or unusual mortality, he should cause special enquiries to be made, and, if necessary, call in the assistance of the nearest medical subordinate.
6. The Patils should also be required to give notice at the police station of the arrival in their villages of any persons from an infected locality. The names of such persons should be entered in a register at the police station, and they should be kept outside the village under observation for ten days and on no account allowed to sleep within the village site. The cause of the death of any person who has recently been in an infected locality should be investigated. In villages remote from a police station the Police Patil should discharge these duties, but the Revenue Patil and the Kul-karni should be held equally responsible.
7. The returns referred to in paragraphs 4 and 5 will show, both in towns and villages, any unusual mortality over the average of previous years, and also the occurrence of two or more deaths in one house or localised area when immediate special enquiry is necessary.
8. For the discovery of cases of sickness it will be necessary to obtain the assistance of the more respectable residents in each quarter, street or group of houses. In any doubtful case of sickness they could obtain the services of the medical subordinate attached to the dispensary, or a hospital assistant may be specially deputed to aid the residents in the work of detection.
9. It should be made obligatory under the Epidemic Diseases Act for the occupier of each room or house in an infected town to notify all cases of sickness and death, occurring in the room or house occupied by him, and for every medical practitioner practising in such a town to report all cases of sickness and death coming to his knowledge in the practice of his profession.
10. When there is reason to believe that cases of plague are occurring in a town or are likely to occur, owing to its proximity to an infected area, the town should be divided into quarters or divisions of a size convenient for effective supervision, and each quarter should be placed, as far as possible, under the charge of an European official, who may be a civil officer, taken from any department, a military or a medical officer, according to circumstances.
11. The quarter under each officer should be sub-divided into defined areas, which might consist of a street, a portion of one, or a group of houses, and each of these sub-divisions should be placed under the charge of a district or local subordinate, who may, for convenience, be called a supervisor. With each supervisor will be associated one or more residents of the sub-division, who will assist the supervisor in obtaining information regarding sickness and mortality in the areas respectively allotted to him. Under each supervisor will be a gang of coolies, varying in number to suit the requirements of each locality. The gangs working in the more populous towns should be divided into three sections, each with defined duties as follows:—
 - (a) for the detection of cases and their removal to hospital;
 - (b) for the evacuation of houses and for the removal of the inmates to camp; and
 - (c) for the disinfection of houses.

12. So long as plague exists in the Presidency, it is advisable that the above organisation should be prepared for each town and district area, native Superintendents being substituted for Europeans in the latter, and the members should be ready to act when the necessity arises. At each town exposed to danger an observation camp should be provided where all suspicious arrivals from infected areas may be detained for ten days.

13. It is believed that under such a scheme information regarding all cases of sickness will be easily and readily obtained, but should the people be unwilling to assist the authorities, or withhold the necessary information, then it will be advisable to organise search parties under the charge of the Divisional Superintendent. Each search party should be accompanied by a Medical Officer or subordinate, and by a female, either European or Native.

14. It is absolutely essential to success that all the measures mentioned above for the suppression of the disease should be carried out promptly and effectively. To ensure this being done all the members of the staff engaged in the work should have a clear idea of their duties: the operations will then be conducted in a methodical and systematic manner.

15. The Superintendent should be provided with a suitable office situated in his own division, where he should remain the whole day, except at intervals for meals. The office will be his headquarters to which all communications should be sent, and at which the Supervisors will make their daily reports. He will exercise a general supervision over all the operations and will issue orders for the necessary action to be taken by each section of the gang of coolies.

16. No house vacated on account of plague may be re-occupied without his sanction, and he may cause a notice to that effect, to be affixed to each vacated house. He should place a seal on boxes containing valuable property left in houses which have been evacuated on account of plague. Such property may be removed by the owner, but if he declines to do so, it will remain at his risk.

17. Property of any value belonging to the poorer class which it may be considered necessary or advisable to destroy as being infected should be appraised by two or more respectable natives and the value paid to the owner by the Superintendent of the division. Compensation should also be given without delay to the very poor for the destruction of clothes, &c., which although they may be of no market value yet serve a useful purpose to the owners.

18. After a house has been disinfected, the door will be secured by a padlock, of which the Superintendent will retain the key or entrance may be barred by any other effectual method.

19. The stock of disinfectants, padlocks and all surplus appliances for divisional use will be kept in or near the office.

20. Each Supervisor will keep a list of all residents in each house in his sub-division. He will inspect all new arrivals, and will obtain information from them as to their previous place of residence. He will, in company with the local resident appointed to assist him, visit all the houses in his sub-division, and obtain information regarding the health of the different inmates, and will, on the conclusion of his rounds, report verbally to his Superintendent the occurrence of all cases of sickness and death and any information regarding arrivals from infected localities. Any case of plague, and all doubtful ones of sickness should be at once reported to the Superintendent at his office by day, and at his house by night.

21. The Supervisor will be provided with a sufficient supply of disinfectants ready for use, with tubs, buckets, watering pots, one or two hand-pumps, either jet or spray, and implements required for unroofing houses and making holes in the walls. There should also be a dooly, charpoy or bamboo frame for the removal of the sick. It should be thoroughly washed or sprayed with perchloride of mercury solution, either at the hospital or sub-divisional depot after use. This is necessary, as the same dooly may be used for carrying suspected cases to the observation ward. All the above articles should be kept in a room or yard near the centre of his sub-division or at the Superintendent's office.

22. On a report being received by a Superintendent, of the occurrence of a case of plague, he should at once proceed to the house, and when he has satisfied himself that the case is one of plague or of a suspicious nature, he will at once give orders for the removal of the patient, either to the Plague Hospital or to the observation ward, according to the opinion he has formed of the case. The other inmates of the house, with their movable property, should be taken to the segregation camp, in charge of one or more policemen or other responsible persons.

23. They will be supplied with passes by the Superintendent admitting them into hospital and camp. These passes after countersignature by the medical officer or the officer at the camp will be returned through the policemen to the Superintendent.

24. After evacuation of the house, the walls and floors of all rooms, with their contents, except articles of food which it is not intended to destroy, and of all enclosures, should be thoroughly drenched with a solution of perchloride of mercury, and in the course of two or three days coated with freshly prepared limewash. All rags and refuse found in the house or enclosure should be burned in the presence of the supervisor.

25. The roof, if not a pukka one, should be removed, and holes should be made in the walls to admit freely air and light to the smaller rooms and enclosures. On the completion of these operations, the door should be secured with a padlock.

26. The coolies engaged in the work of disinfection, &c., should be provided with boots or shoes, to protect their feet from the danger of infection through abraded surfaces.

27. It may be necessary, owing to the occurrence of several cases in the one area, to vacate a group of houses or a whole sub-division. Should any necessity exist for the adoption of such a measure, it should be carried out as soon as possible by placing a cordon of police or troops around the area and removing the whole population to the segregation camp. Disinfection and unroofing of the houses to be carried out in due course.

28. Experience has abundantly proved that the evacuation of an infected house or houses is seldom in itself sufficient to stamp out the disease. When plague manifests itself in one house, in an indigenous form, those in the neighbourhood have, as a rule, already become infected, and it usually follows that cases subsequently appear in them. It is therefore always a wise and prudent course on the occurrence of an indigenous case, not only to evacuate the one house but also all those in the immediate neighbourhood.

29. On the evacuation of the houses in the infected area, all the other inhabitants should be encouraged to leave the town and any obstacles which may tend to delay their departure should if possible be removed. The time for prescribing the issue of passes should be carefully considered by the collector, as if the rules prohibiting departure without passes are applied prematurely the exodus of the inhabitants generally will be retarded, more particularly of the poorer classes, who feel diffident about applying for passes or are too apathetic to do so.

30. In a large town where the disease has become of general prevalence, every quarter being affected, and the arrangements for dealing with the epidemic are incomplete and defective, measures must be taken to regulate the departure of the population and prevent them carrying infection to healthy areas. Every effort should in the meantime be made to provide sufficient accommodation in huts for a large proportion of the population.

31. In the case of villages badly infected the whole of the inhabitants should be turned out. Villagers are accustomed to erecting shelters for themselves, but, if necessary, materials for hutting should be supplied. The sick and suspected villagers should be carefully separated from the healthy and an officer should be appointed to examine the daily health of the population and prevent migration to other villages.

32. Daily inspection of villages situated in the neighbourhood of an infected locality should be instituted and maintained during the out-break, and continued for ten days after the occurrence of the last case, with special reference to the exclusion of refugees who should be required to camp out.

33. A site for the hospital should be selected as near as possible to the infected population, but a permanent building, suitable in all respects for a hospital, may sometimes be obtained either inside or on the outskirts of the town. It can be easily disinfected when it is no longer required for an hospital, and such a building would be more popular and convenient than huts erected at a distance from the town.

34. If a suitable building is not available it will be necessary to erect huts for plague patients, for convalescents and for the observation of doubtful cases, on the nearest site. The hospital huts intended for females should be some distance apart from those intended for males. The size of each hut will depend on the number of patients expected, but it is advisable not to place a large number of patients in one hut. A series of huts, each capable of accommodating six to twelve patients, will be the best arrangement, and it is one which will admit of the higher and lower castes securing separate accommodation. Movable mat screens should be provided between the beds to secure as much privacy as is possible to each patient. Every patient should be supplied with a cheap substitute for a spittoon, and both it and the vessels used as bed pans, should contain a sufficient quantity of an effective disinfecting solution. The floor of the hospital huts should be freely watered daily with the perchloride of mercury solution, and vessels containing the same solution should always be available for the disinfection of the hands and feet of the native attendants.

35. One relative or friend may be permitted to attend a patient, and a stated time should be set apart for the visits of relatives and friends of the patients.

36. On the arrival of the patient at the hospital, all his clothing should be removed and burnt in the presence of the medical subordinate. Hospital clothing should then be supplied. On recovery the patient may be transferred to the convalescent ward or dismissed. In either case he should be given a warm bath and supplied with new clothes. The hospital clothing, on the discharge or death of the patient, should be disinfected, washed and exposed to the sun for a few hours, after which it may be again taken into use.

37. The hospital and observation wards should be surrounded with a bamboo or other fence.

38. Huts for the segregation of individuals removed from infected houses, and of all suspected persons, should, if possible, be erected at a convenient distance from the hospital compound, and should be surrounded by a bamboo or other fence. Individuals brought for admission into this camp should, for purposes of cleanliness, be bathed in a solution of carbolic acid, one to a hundred parts of water, and their clothing soaked in a solution of one to twenty; if there are no children, perchloride of mercury solution may be used for the latter purposes.

39. All the inmates should be inspected daily, either by the medical officer or a medical subordinate, and any case of plague detected should be removed at once to hospital, and doubtful cases of fever to the observation ward. If no case occurs amongst them, after an interval of 15 to 30 days, they may be allowed to return to their houses, if such houses have been cleaned and disinfected and if the local authority considers that they are fit for re-occupation, or be admitted into the camp for healthy individuals, after a second disinfection of their clothing.

40. Both the hospital compound and the segregation camp should be guarded by troops or police, to prevent the egress of inmates.

41. The establishment of separate hospitals and segregation camps for the reception of members of special castes and religions should be encouraged and every assistance should be given by the local authority for their erection and supervision. The treatment of the patients admitted into these hospitals may, if desired, be placed in the hands of Vaidis and Hakims and the internal management of both hospitals and camps may be conducted by members of the caste or religion concerned, subject however to the general supervision of a European doctor where possible and control of the local authorities and to the usual arrangements as regards guards.

42. A camp for the healthy, *i. e.*, for people removed from houses not infected, should also be arranged for. All individuals admitted into it should also be bathed and their clothes disinfected as with admissions into the segregation camp. They should be allowed to pursue their daily employments, on condition that they sleep in camp. The huts should be numbered, inmates registered and a daily inspection made of all the residents. If no case of plague has occurred in a hut for 15 to 30 days, the inmates may, after a second disinfection of clothing, be allowed to return to their houses if such houses have been cleaned and disinfected and if the local authority consider that they are fit for re-occupation.

43. Should a case of plague occur in a hut, the patient should be removed to hospital, and the other inmates to the segregation camp. The hut should be removed, the site disinfected with the perchloride of mercury solution, and the materials of the hut should be similarly disinfected and exposed to the sun for a couple of days, when they can be utilised in the erection of another hut on a new site.

44. The best arrangements should be made for a plentiful supply of water to the different camps. If the water-supply to the town is conveyed through pipes, connections should be carried into the camps. Bathing platforms at some distance apart for the two sexes should be constructed, and provided with surface drains for the removal of surplus water.

45. Separate latrines for the sexes should be erected in connection with the two camps and hospital, and they should be well lighted with ordinary post lamps.

46. Bunniahs' shops with all supplies should be provided for each of the camps.

47. Cases of plague imported into towns and villages, if they are not at once discovered and isolated, will, under existing conditions, develop new centres of the disease and thus infect fresh localities. It is a difficult matter to detect such cases in transit from an infected area.

48. Medical inspection of travellers by rail and road is useful in discovering those actually suffering from the disease or affected with the preliminary symptoms of fever, but as the period of incubation may extend to eight or nine days, it is evident that inspection is of no avail in detecting infected travellers, who are in the stage of incubation. Such travellers cannot be discriminated from the non-infected, and it is necessary for their detection that they should be kept under observation for a period not exceeding ten days.

49. Passengers or travellers who can produce satisfactory evidence that they have not been exposed to infection, may be exempted from detention, as it frequently happens that only one or a few places may be infected in the particular district. The local authorities should give certificates to all persons wishing to travel from the non-infected areas in the district, stating that the holders (giving names, &c.) have not been exposed to infection.

50. The period of observation may, in the case of travellers of ascertained respectability, be converted into one of surveillance at places of destination, if they give satisfactory assurance (or furnish security) that they will report themselves daily to an authorised medical officer. Lists of such passengers should be forwarded either by wire or post to the local authority at place of destination, and any one failing to report may be prosecuted. The medical officer is not at liberty to exempt the individual from attendance without the concurrence of the local authority.

51. The inspecting officer may, however, exercise his discretion as to the necessity of detaining any particular individual.

52. In addition to medical inspection at select stations a medical officer or subordinate should, if available, be appointed to travel by each train from or passing through an infected district for the purpose of examining passengers booking and alighting at all stations along the line.

53. The object in exercising control over the movements of travellers from an infected area is for the general welfare of the public and not to harass the individuals. It is hoped that by detaining passengers from an infected area, the healthy or non-infected will be eliminated after a few days, and

allowed to proceed on their journey. If the preparatory measures as previously detailed for the suppression of the disease are carried out in an efficient manner, there is every reason to believe that restrictions on travelling will be unnecessary.

54. Any arrangement calculated to prevent the exodus of the healthy from an infected locality or area, must tend to produce a more virulent form of the disease, and its more rapid diffusion among the community.

55. Camps will be established, under the orders of Government, at selected stations suitable for detention of passengers and for the disinfection of clothing and baggage.

56. The above rules will also apply to travellers by road.

57. For preparation of the perchloride of mercury solution for disinfection, see Appendix.

APPENDIX.

The most convenient and satisfactory way of preparing the solution of perchloride of mercury, on a large scale, is that which has been recommended by Dr. Maynard, now on plauge duty in Násik.

The ingredients should be mixed in a 50-gallon cask in the following quantities: to 77 lbs. of perchloride of mercury and 38½ lbs. of pure salt add 15 gallons of boiling water, stir well with a wooden stick, and then fill up the cask with cold water. The solution contains one part of perchloride to 6½ of water, and one ordinary quart bottle, of it, added to 25 gallons of water—the capacity of the ordinary wooden tubs in use—will give a strength of 1 in 1,000.

The standard solution can be carried about in quart bottles placed in partitioned boxes, and is always ready for use without further weighing or measuring.

If the solution is prepared with cold water, the perchloride of mercury must be powdered and two parts of pure salt to one part of perchloride added. The whole should be well stirred until the solids are completely dissolved.

It is of advantage, for several reasons, to add one-half per cent of crude Hydrochloric acid to the solution.

Iron hoops of all casks, tubs, and buckets should be dammered. If iron receptacles are used they should be dammered inside and outside.

If metal pumps are employed for distributing the solution, they should, previous to use, be worked in vegetable oil, and after use thoroughly cleaned in water. This will tend to lessen the corrosive action of the mercury.

In the above—

For Patil
For Mamlatdar
For Police Patil
For Collector
For Revenue Patil and the Kulkarni

read Patel.
" Amildar.
" Patel.
" Deputy Commissioner.
" Shanbhog.

V. P. MADHAVA RAO, *Plague Commissioner*
in Mysore.

Notification No. 37—*Mis. 20, dated 23rd January 1898.*

As the bringing of used apparel, bedding, &c., from places which are affected by plague is considered to be highly dangerous, His Highness the Naizam's Government are pleased to direct that all used apparel and bedding (except when carried as personal baggage of travellers) also rags, waste paper, used gunny bags, &c., which may be brought from any portion of the District of Sholapur to any part of His Highness' Dominions will be at once taken charge of by the plague authorities or by the District Officers. If such apparel or bedding is valuable and can be disinfected it will be so disinfected before being made over to the owners, otherwise it will be destroyed by being burnt. The question whether articles shall be disinfected or burnt is left to the discretion of the officials discharging this duty. No claim shall lie against His Highness' Government for losses sustained by the destruction or disinfection of articles under this order, and the public are therefore warned not to import any articles of the kind above described.

True Copy,

B. SADAGOPACHARLU,
for Supt., Issue Branch, Resident's Office,
Hydrabad.
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